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## My NASA Data - Mini Lesson

### NASA's Earth Minute: Greenland Ice



#### Mini Lesson

Watch the short video and answer questions.

Show the video once.

Give the students the questions.

Show the video again, pausing as needed for students to record their answers.

Questions:

1. Why did coal miners take canaries into coal mines? (to warn of trouble)
2. How is the Greenland ice sheet like a canary in a coal mine? (It can alert us to what is in store for the rest of the planet from warming.)

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3. What is the only place on Earth with more land ice than Greenland?
  4. If ALL the ice from the Greenland ice sheet melted, what would happen to sea level? (rise 23 feet)
  5. How long might it take for ALL the ice from the Greenland ice sheet to melt? (centuries)
  6. How much water is the melting Greenland ice adding to the ocean each year? (250 gigatonnes)
  7. What is a gigatonne? (1 billion tonnes)
  8. What other changes be a result of the melting ice? (changing circulation patterns in oceans and atmosphere)

Source: <https://www.jpl.nasa.gov/edu/learn/video/nasas-earth-minute-greenland-ice/>

Located in the Arctic near the North Pole, Greenland is covered by a massive ice sheet three times the size of Texas and a mile deep on average. Greenland is warming almost twice as fast as Antarctica, which is causing the ice to melt and raise global sea levels. NASA is monitoring Greenland's ice sheet from high up in space down to the ocean floor to provide data for scientists studying the global impact of all its melting ice.